

NET 2210	Linux Systems Administration Spring Semester 2021
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Instructor	AJ Hepler Office: D2 308N (Davis Campus) Phone: 801-395-3433 E-mail: ajhepler@weber.edu Virtual Office Hours: Tuesday, Wednesday 2:30pm-5:00pm (Please email me for a Zoom link)
Classroom	Online
Textbook	<i>NDG Introduction to Linux 1</i> (1 st Edition). (ISBN: 978-1946780041) The textbook for this course is a digital service that can be purchased directly from the publisher's website. You will be prompted to pay for the text when you first try to access the curriculum on the https://www.netacad.com website. You may also purchase an access code at the following address: https://content.netdevgroup.com/buy/60434/ , or make arrangements to purchase the code through the Weber State bookstore.
COVID-19	<p>Although this is an online class, it is important that you are aware of on-campus requirements should you need to visit any of the Weber State campuses or facilities. This will help ensure that we all do our part to minimize the potential impact of COVID-19 this semester.</p> <p>Information about COVID-19 response plans, student expectations, and other pertinent information can be found at https://www.weber.edu/coronavirus/default.html. This page is frequently updating, so you should try to check it often. Communications about any University updates will be sent out as applicable.</p> <p>All students in this course will be required to read, understand, and acknowledge that they will abide by and follow the coronavirus mitigation protocols that are in place whenever visiting a Weber State Facility. Any students taking in-person, face-to-face courses will be required to take a COVID-19 test within 10 days of the start of the semester.</p> <p>After January 22nd, students, faculty, and staff will be randomly selected to take COVID-19 test. A full description of expectations and guidelines for students during the Spring 2021 semester can be found at https://www.weber.edu/wsuiimages/academicaffairs/Forms/StudentExpectations.pdf. Note that you will need to acknowledge that you have read this document and agree to the expectations prior to being permitted to start this course.</p> <p>If we all do our part to keep ourselves and those around us safe, we can minimize the likelihood of a University closure, and take one more step towards a new normal.</p>
Course Description	<p>This course gives students a solid foundation in the fundamentals of the Linux operating system. Students gain system-level experience through problem-solving exercises at the command line and in the graphical user interface (GUI). By the end of the course, students will have learned the major, essential, command-line commands necessary to be accomplished users of Linux.</p> <p>Course Prerequisite: NET 2200</p>

<p>Learning Outcomes</p>	<p>Upon successful completion of this course, students should be proficient in the following areas:</p> <ul style="list-style-type: none"> • Navigate Linux using the command line • Effectively utilize built-in Linux utilities • Manage hardware and software • Configure and maintain networking features • Write custom shell scripts • Manage system services, permissions, files, and directories
<p>Class Information</p>	<p>Students are expected to watch the videos and read the materials associated with each week located in Canvas. Questions and comments are strongly encouraged. It is expected that students will read the material related to each week's coursework and pay attention to any announcements posted throughout the semester.</p>
<p>Assignments, Quizzes, and Exercises</p>	<p>Assignments for the class will be accessible at the beginning of each week on Canvas. Assignments will consist of review quizzes and lab exercises. Due dates will be available inside each assignment's instructions on Canvas. Late assignments may be accepted with a 10% penalty for up to an additional week to provide for unforeseen circumstances. Assignments submitted beyond one week late will not be accepted.</p> <p>You will be required to complete quizzes inside of the Cisco Networking Academy online system located at https://www.netacad.com/, and you will submit your scores in Canvas through Weber State. The scores and grade book you see on the Cisco Networking Academy do not accurately reflect your grade in the Weber State course as you will be completing additional exercises outside of the Networking Academy. Your grade will be tracked on Canvas instead.</p>
<p>Exams</p>	<p>The course will consist of two exams; a midterm and a final. The exams will be administered via the Chi Tester and will be proctored by the Weber State testing center. Exams must be taken during the exam period provided and cannot be taken late.</p> <p>Due to COVID-19, some limitations have been placed on which testing centers can be used for any course that has tests administered through the testing center. Each course at the University has been designated one testing center for any test that must have physical attendance. This semester, students in this course have been authorized to use the <u>Davis Testing Center</u> at the Weber State <u>Davis Campus</u>. That means you must make arrangements to visit that testing center if you prefer to take exams onsite at Weber State.</p> <p>The other option for exams in this course will be to take them online using a service called Proctorio. This service is free to you and does not require an appointment. The testing center recommends that you take a practice exam prior to attempting an actual exam in the course to familiarize yourself with the process. Details about Proctorio can be found at the following link: https://www.weber.edu/testingcenter/online-testing.html</p> <p>As Proctorio has gained popularity, so have the number of exam attempts that have been flagged for not following the proper procedures when taking tests. If you opt to use Proctorio for taking exams, make sure you pay close attention to each of the requirements when setting up your exam environment. The most commonly flagged issue has been students not completing a 360-degree scan of the room they are taking tests in. Be sure to comply with the rules outlined on the site above to avoid risking your exam results being invalidated.</p>

Accommodations for disabilities	Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Service Center.																														
Grading	<p>Final grades will be weighted based on the following criteria:</p> <table border="1" data-bbox="480 352 927 464"> <tr> <td>Quizzes</td> <td>10%</td> </tr> <tr> <td>Assignments and Labs</td> <td>40%</td> </tr> <tr> <td>Exams</td> <td>50%</td> </tr> </table> <p>The final grade will be given based on points accumulated through assignments, quizzes, exams and labs. Standard grading will apply:</p> <table border="1" data-bbox="480 594 927 804"> <tr> <td>94-100</td> <td>A</td> <td>74-76</td> <td>C</td> </tr> <tr> <td>90-93</td> <td>A-</td> <td>70-73</td> <td>C-</td> </tr> <tr> <td>87-89</td> <td>B+</td> <td>67-69</td> <td>D+</td> </tr> <tr> <td>84-86</td> <td>B</td> <td>64-66</td> <td>D</td> </tr> <tr> <td>80-83</td> <td>B-</td> <td>60-63</td> <td>D-</td> </tr> <tr> <td>77-79</td> <td>C+</td> <td>0-59</td> <td>E</td> </tr> </table>	Quizzes	10%	Assignments and Labs	40%	Exams	50%	94-100	A	74-76	C	90-93	A-	70-73	C-	87-89	B+	67-69	D+	84-86	B	64-66	D	80-83	B-	60-63	D-	77-79	C+	0-59	E
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Allocated Time	You should anticipate spending two to three hours of study per week for each credit hour of a university course. Computer and programming classes typically require time in the upper range.																														
Policies	Exams can only be taken on the dates given unless arrangements are made to take them ahead of time. If you know you are going to be absent at any point during the semester, notify your instructor so you can keep up with the material covered in class.																														
Academic Integrity (Cheating)	<p>Students are expected to maintain academic ethics and integrity in regards to performing their own work. The WSU Student Code states clarifies cheating. Cheating, which includes but is not limited to:</p> <ol style="list-style-type: none"> 1. Copying from another student's test paper 2. Using materials during a test not authorized by the person giving the test 3. Collaborating with any other person during a test without authority 4. Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of any test, without authorization of the appropriate official 5. Bribing any other person to obtain any test 6. Soliciting or receiving unauthorized information about any test 7. Substituting for another student or permitting any other person to substitute for oneself to take a test 8. Plagiarism, which is the unacknowledged (uncited) use of any other person or group's ideas or work. This includes purchased or borrowed papers. 9. Collusion, which is the unauthorized collaboration with another person in preparing work offered for credit 10. Falsification, which is the intentional and unauthorized altering or inventing of any information or citation in an academic exercise, activity, or record-keeping process 11. Giving, selling or receiving unauthorized course or test information 12. Using any unauthorized resource or aid in the preparation or completion of any course work, exercise or activity 																														

	<p>13. Infringing on the copyright law of the United States which prohibits the making of reproductions of copyrighted material except under certain specified conditions</p> <p>School of Computing policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor, will result in:</p> <ol style="list-style-type: none"> 1. An automatic failing grade for the class 2. A report to the Dean of Students that will include the student's name and a description of the student's dishonest conduct <p>Further disciplinary action may be taken by the University as it deems appropriate. You can find more information about academic honesty in the Weber State Policies and Procedures Manual. http://www.weber.edu/ppm/Policies/6-22_StudentCode.html</p> <p>If you are not sure whether or not you might violate one of these stipulations, check with your instructor prior to submitting any assignments with questionable content. Refrain from the urge to copy and paste content from the web or anywhere else. A poor grade on a single assignment is much better than a failing grade for the course.</p>
Course Fees	<p>Course fees for the NET major are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.</p>
Emergency Closure	<p>In the event of an emergency or campus closure, please check Canvas for more information. You may want to sign up for Weber State's Code Purple if you haven't done so already to be alerted when these things happen. (https://www.weber.edu/codepurple)</p>

Tentative Class Schedule and Course Outline (subject to change)

Week of	Topic	Coursework
January 11 Week 1	Accessing the Linux Environment	Lab Assignment 1
January 18 Week 2	Configuring the Linux Shell	Chapters 1, 2, and 3 Quizzes Lab Assignment 2
January 25 Week 3	Working with Files	Chapters 4 and 5 Quizzes Lab Assignment 3
February 01 Week 4	Using Text Utilities	Chapters 6, 7, and 9 Quizzes Lab Assignment 4
February 08 Week 5	Regular Expressions, Streams, and Redirection	Chapters 8 and 10 Quizzes Lab Assignment 5
February 15 Week 6	Archiving and Managing Processes	Chapters 11 and 12 Quizzes Lab Assignment 6
February 22 Week 7	File Permissions and Links	Chapters 13 and 14 Quizzes Lab Assignment 7
March 01 Week 8	Midterm Exam Review	Midterm Exam
March 08 Week 9	Spring Break	Spring Break (no assignments)
March 15 Week 10	Introduction to Bash Scripting	Lab Assignment 8
March 22 Week 11	Hardware, Booting, and Runlevels	Chapters 15, 16, 17, and 18 Quizzes Lab Assignment 9
March 29 Week 12	Creating and Mounting Partitions	Chapters 19, 20, 21 Quizzes Lab Assignment 10
April 05 Week 13	Managing Users and Groups	Chapters 22, 23 Quizzes Lab Assignment 11
April 12 Week 14	Package Management and Special Permissions	Chapters 24, and 25 Quizzes Lab Assignment 12
April 19 Week 15	Virtualization Final Exam Review	Chapter 26 Quiz Lab Assignment 13
April 26 Week 16	Finals Week	Final Exam